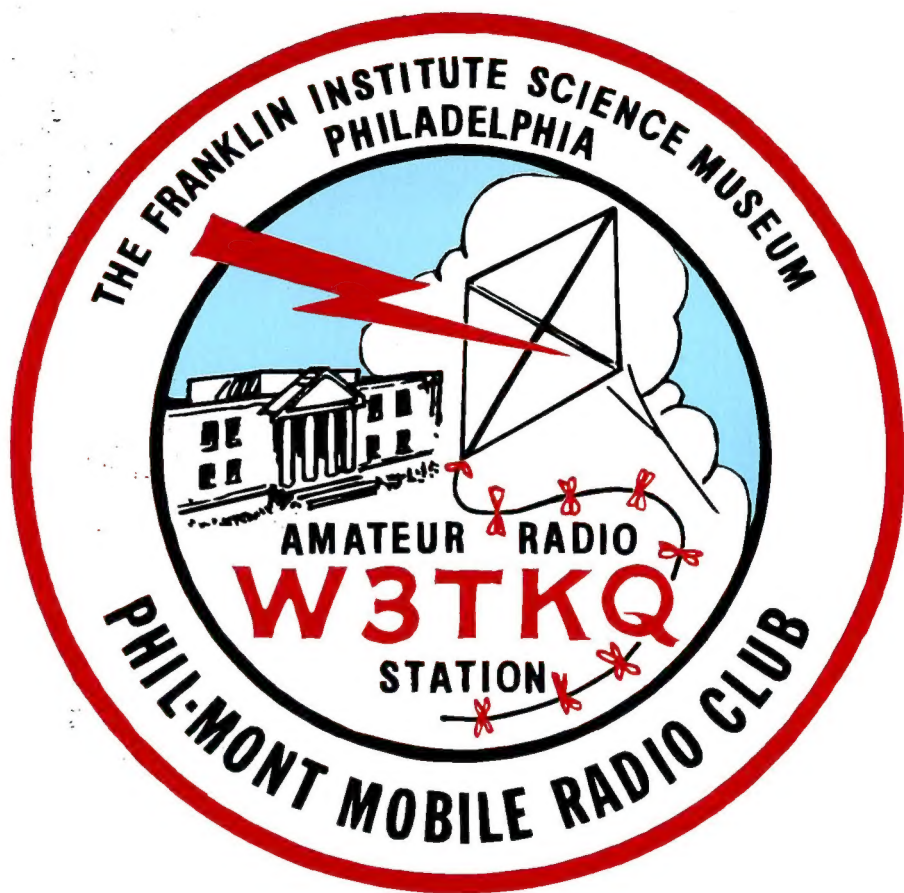


# *Rededication*



*October 23, 1991*

# **Amateur Radio Station W3TKQ**

**First licensed March 5, 1952**

**First contact April 5, 1952**

## **Trustees:**

**Fredwood S. Shaw, W3ADV – 1952-1975**

**Rolland E. Madara, W3PWG – 1975-Present**

## **Official station operators 1952-1990:**

**(listed chronologically)**

**Mason Frankenfield, W3PBR**

**Nelson Schurr, W3DYP**

**Lester Ransom, K3REN**

**Paul Singewald, W3YG**

**Sam Moskowitz, K3RTR**

**Rolland Madara, W3PWG**

**Frank Whitten, K3TEF**

**Fred Fowler, WA3AAL**

**Joe Johnson, K3VXU**

**John Russell, N3ABC**

**Jack Kramer, KA3PJC**

## CONGRATULATIONS!

This beautiful station that is being dedicated here today, takes me back in memory to the time when W3TKQ was first operated in “Electrical Hall,” some forty years ago.

To all of the Hams who started this station with home-built equipment, and to all the hams who kept it going for all the intervening years, I say that you have done a great thing.

As Trustee of W3TKQ from its beginning until 1975, I say “Thank You” to all those who helped to keep this station on the air. This includes all of the people of The Franklin Institute.

W3TKQ will always be the greatest!

Fredwood S. Shaw, W3ADV

### Original Station 1952-1962



*Mason Frankenfield, W3PBR – first operator*

# Whiskey Three Tango Kilo Quebec

## *A Legacy*

In the years before the surprise attack on Pearl Harbor December 7, 1941, our country had citizens that were concerned about civil defense and, more specifically, what would happen to our communications network if our country was subjected to foreign air attacks. One such group of men was the Haverford Township Emergency Radio Net, a civil defense oriented amateur radio club.

In 1950, Dr. Wynn Laurence LePage, who was at that time the Executive Vice President of The Franklin Institute, decided to obtain the help of a neighbor, Fred Shaw, W3ADV, in becoming an amateur radio operator. After successfully earning his amateur call, W3QCV, Dr. LePage became a member of the Haverford group.

It was now 1951, and Dr. LePage proposed that the Haverford Township Net sponsor an amateur radio station at the Institute as an exhibit for all to enjoy. After enlisting the help of a few additional amateurs, a station license for W3TKQ was obtained with Fred Shaw in the capacity of trustee.

When the station began its operation on April 5, 1952, it only had 2 and 10 meter home-built equipment in operation, and while time permitted only week-end and holiday operation it, none-the-less, became a very popular station.

Net members scheduled their operating hours to keep W3TKQ on the air, but soon it became apparent that it would be very difficult to continue in this manner. Shortly thereafter, The Institute secured the services of Mason Frankenfield, W3PBR, the station's first "paid" operator, whose duties were to be a demonstrator in the electrical hall, and, in his spare time, operate W3TKQ. This program worked very well until about 1960, when it was discovered that Mason was beyond The Institute's mandatory retirement age. Additional operators were soon obtained, and the policy of "part-time" operators was continued until September 20, 1990.



*The glass enclosed station with brand new Collins equipment – 1962*

In 1954 both Dr. LePage and Fred Shaw convinced the Hallicrafters Company to donate a new Receiver. A Johnson Viking I transmitter and a Mosely Tri-Band beam were also obtained.

In 1960 Dr. LePage, now the President of the Institute, (1958-1967) believing that a larger, more active group should take over the station, suggested the Phil-Mont Mobile Radio Club. He also suggested that the club should consider having its monthly meetings at the Institute as well. Thus, a bond developed that, to this day, has been advantageous for both organizations.

Club members sprang into action. The Institute donated space and enough money for a glass enclosure for the station, and a beautiful station emerged, thanks to the efforts of charter-member, and general contractor, W3QQH, (now W3BBB) Jim Spencer. The Institute donated air conditioning, and the Bell Telephone Co. donated telephone instruments, amplifiers, and loud speakers so that visitors could not only see but hear the station in actual operation. Jim even designed the backlighted directional map, so that visitors could see the area of the world where each contact was being made.

At the same time Dr. LePage convinced the Collins Corporation to donate a complete Collins station. Approximately \$5,000 in equipment and materials was donated to be assembled by Jim Spencer. A walnut console-desk provided positions for all the equipment. When the station was dedicated on May 19, 1962, it appeared that nothing was too good for the Phil-Mont Mobile Radio Club and The Franklin Institute.

In August, 1975, Rolland Madara, W3PWG, became the station's trustee, and soon after, in 1976 it was decided that, the station would be relocated to the other end of the second floor, along with the man-made lightening exhibit. The station however, continued in daily operation, still using the original Collins equipment.

In 1982, the club's then liaison to The Franklin Institute, John Tinaglia, W3AWH, campaigned to replace the aging Collins equipment with a complete new station. With the assistance of Hamtronics of Trevoze, Pa, a brand-new station was



*Rolland Madara, W3PWG, with Drake equipment – 1984*

obtained from the R.L. Drake Company, and installed in May. The equipment consisted of a TR7/DR7 transceiver, L7-2kw amplifier, MN-75 matching network, RV-7 VFO, Theta 7000E communications terminal and a TR-930 video monitor. In the fall of 1984 a new Telrex beam antenna was installed, and after some minor repairs, continues to serve the station today.

At the end of July, 1986, the station was moved once more to a "temporary" location on the fourth floor, where it remains today.

Recognizing the deteriorating condition of W3TKQ, Jake Kovalchek, AK2I, at the club's March 1990 Board of Directors' meeting, was appointed "Special Liaison to The Franklin Institute." Shortly thereafter, he began a letter-writing campaign to manufacturers of amateur equipment.

In July he voiced his concern with the "direction that the Institute was taking regarding exhibits" (referring to the newly completed Omniverse theatre and other modern exhibits). Thus, it did not come as a complete surprise when, in September, the club was told that, due to The Institute's critical financial condition, the current "operator-demonstrators" would be laid-off, and the station would be asked to vacate the Institute.

Jake, in characteristic form, developed an action plan, and, with assistance from Kay Craigie, KC3LM, Vice Director of the Atlantic Division of the ARRL, made a presentation to the management of the Institute. Their proposed plan was enthusiastically approved, and the station of today is the culmination of one year of concentrated effort by Jake and the many volunteers who have donated countless hours and dollars to make his dream come true.

Special recognition must again go to Jim Spencer, W3BBB, who, almost 30 years later, has again provided the technical and mechanical expertise to assemble this premier amateur radio station.

But to Jake goes the lion's share of the congratulations. Recently recognized as the ARRL Atlantic Division's "Amateur of the Year" for 1991, he continues daily to prove his dedication to the advancement of Amateur Radio.

### ***Partial listing of equipment***

AEA PK-232MBX terminal with Pakratt 232 w/mailbox	Kenwood TL-922A linear amplifier
Citizen wide-carriage printer	Kenwood SM-230 monitor scope
Dedicated 2-meter intercom transceiver with DTMF signalling	Kenwood TS-950S HF transceiver
Drake MN2700 matching network	Kenwood PC-1A phone patch
Drake TR7A transceiver	Midland 13-510 2-meter transceiver
Drake UV3 144/220/440 MHz transceiver	Okidata microline 192 printer
Goldstar VCR	Rupp Electronics TR100 digital power & SWR meter
HAL ST-6000 demodulator w/scope	Sharp VCR
HAL DS-3100 ASR keyboard & monitor	Shintom VCR
IBM PC (packet)	Sony 23" color monitor (2)
ICOM IC-970H multiband all-mode transceiver	Tandy 1000RL PC w/20mb HD (satellite)
KAM all-mode TNC	Wyman Research WR450 ATV transceiver
Kenwood 2550A 2-meter transceiver	Yaesu G-5600B elevation & azimuth dual controller



## THE AMERICAN RADIO RELAY LEAGUE, INC.

INTERNATIONAL SECRETARIAT OF THE INTERNATIONAL AMATEUR RADIO UNION

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U.S.A. 06111

September 14, 1991

The Phil-Mont Mobile Radio Club  
Philadelphia, PA

Dear Friends,

The transformation of W3TKQ into a state-of-the-art Amateur Radio Station is a wonderful example of what local Amateurs can accomplish through dedication, generosity, and hard work.

Thanks to your support of this project, thousands of future visitors to the Franklin Institute Science Museum will benefit from witnessing today's Amateur Radio in action. You are opening the eyes and minds of young and old alike to the opportunities for learning, self-challenge, service, and fellowship offered by Amateur Radio.

Amateur Radio contributes a great deal to each of our lives. Through W3TKQ, you are giving something back to Amateur Radio. In the future, not only Radio Amateurs but also the viewing public will look back at your efforts with admiration and gratitude.

The Phil-Mont Mobile Radio Club, the Franklin Institute Science Museum, and all the friends of Amateur Radio whose donations made this station a reality, are to be congratulated. Both of us are proud to be active volunteer operators at science museum stations. On behalf of the Amateurs in the ARRL Atlantic Division, we sincerely thank you all.

73,

Hugh A. Turnbull, W3ABC  
Director, Atlantic Division

Kay C. Craigie, KC3LM  
Vice Director, Atlantic Division

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K1ZZ VLL MGRSCT

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K1TLL VLL MGRSCT

203-695-1541  
FAX 203-695-7531

QST-

1-800-4-A-ARRL

SINCE 1914—OF, BY AND FOR THE RADIO AMATEUR



## THE MISSION OF W3TKQ

To develop a program of instruction and demonstration of Amateur Radio, in as many facets as is possible, to show the vast wealth of information and electronic technology that amateur radio has to offer both the general public, and to the children—our leaders and scientists of tomorrow.

This general statement establishes the foundation of our mission. Our daily efforts, through demonstrations and hands-on exhibits, providing a look at science in the making through the NASA Astronauts' projects, and through our attempts at improving each mode of communication, will build on that foundation.

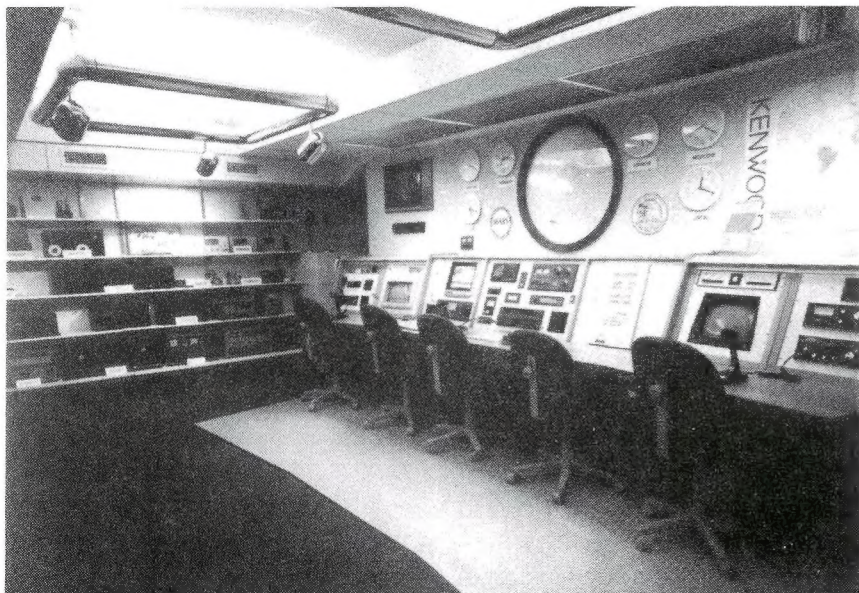
We will strive to preserve the rich heritage and tradition of the Amateur Radio Service. Coupled with The Franklin Institute's role of maintaining historic collections, we have developed one of the finer exhibits of antique radios in the United States. We will continually add to that collection as opportunities present themselves.

We will strive to encourage through education, the Amateur Radio Service, as well as attempt to stimulate the public's awareness of our public service capabilities in the event of disaster.

We will provide instruction, in the science of radio, to our children and young adults, through The Franklin Institute's Children and Adult Workshop program.

We will strive to maintain our station in a "State-of-the-Art" condition, always aware of new and advanced technology, and adding exciting experiments and equipment on a continuing basis. To remain status quo is to regress. We must never allow that to happen.

*Jake Kovalchek, AK2I*



*Today's ultra-modern station and adjacent display of antique radios*



# **Rededication Program**

October 23, 1991

10:00 AM

## **Opening Remarks**

Jacob. S. Kovalchek, AK2I, Master of Ceremonies

*Scene: The time is May 19, 1962....*

## **Introductions**

### **Guest speakers**

Dr. Jim Powell, President and CEO, The Franklin Institute

Mr. Wayne Yoshida, KH6WZ, Kenwood Corp., USA

Mr. Hugh Turnbull, Director, Atlantic Division, ARRL

### **Guest of Honor**

Mrs. Gioia Marconi Braga

### **Presentation of George Weed Memorial Award**

by Bill Popovic, President, Phil-Mont Mobile Radio Club

### **Closing Remarks and Introduction of Operator-Volunteers**

### **Signing of the Log**

*All guests are invited to operate "The NEW TKQ."*

*The operator-volunteers will be pleased to assist.*



PETER H. KOSTMAYER

October 23, 1991

Amateur Radio Station W3TKQ  
The Benjamin Franklin Parkway at 20th Street  
Philadelphia, PA 19103-1194

Dear Friends:

I am delighted to have the opportunity to offer my congratulations as you celebrate the renovation of W3TKQ.

All who worked so diligently to bring this to fruition deserves special commendation.

I applaud you for your efforts and extend my sincere best wishes for many more years of success.

With every good wish,

Sincerely,

A handwritten signature in dark ink, appearing to read "Peter", written over a horizontal line.

PETER H. KOSTMAYER  
Member of Congress

# Phil-Mont... a tradition of service

It was 42 years ago, in 1949, that five young men who shared a common interest met in Glenside, Pa., to form a new amateur radio club: Dick Dickinson, W3AAG; Leroy Hauser, W3PMD; George King, W3PXY; Bill Krewson, W3OQI; and Jim Spencer, W3QQH (now W3BBB). Because their special interest was in mobile operation, they named their new group the Phil-Mont Mobile Radio Club, all of them residing either in Philadelphia or Montgomery County. And for the next few years their monthly meetings were held at the Glenside War Memorial Building.

Interest in operating mobile was growing rapidly at that time, just a few years after the end of World War II and the resumption of amateur radio activity, forbidden during the war years. War surplus radio equipment made it easy and inexpensive to get on the air. But the coincidental emergence of home television sets made it difficult to operate ham radio from a fixed location without the risk of television interference and an FCC citation. Many of the early Muntz, and other “gutless-wonder” TV receivers, straining to pick up a snowy Milton Berle on Philco’s WPTZ, seemed almost equally responsive to harmonics from hams’ unshielded—mostly home-brew—transmitters. Little wonder, then, that many hams opted to avoid the problem by going mobile on six and ten meters.

Surplus transmitting crystals cut for 7 MHz and mounted in FT-243 holders were available for less than 50 cents apiece. One of these in a 6AG7 oscillator circuit, operating on the fourth harmonic and driving an 807 or 2E26 final, provided 25 or 30 watts on ten meters at minimal cost and after only a few nights of bench time. A Gonset converter ahead of the car broadcast radio provided reception. When Phil-Mont bought a quantity of crystals cut for 7373.333, and distributed them to members, our “net” frequency of 29,493 KHz was firmly established.

Walter Bradley Martin, W3QV, who by then had served a number of terms—before and after the war—as ARRL Atlantic Division Director, took many of the early Phil-Monters under his wing, showing them how to build, install and operate a rig. He also instilled in them the “service” aspect of our hobby. Brad, a Naval Reserve Captain who had served as Admiral Halsey’s communications officer in the South Pacific, believed in and espoused the true meaning of the “PICON” clause in the federal communications act; it’s that clause which justifies our very licensing in the “public interest, convenience and necessity.” W3QV monitored 29,493 day and night, and always responded immediately to any mobile—at any hour—with a friendly greeting and offer of assistance. Appropriately, our repeater system continues to sign his call today as a memorial to the significant role he played in Phil-Mont’s early development and direction.

Phil-Mont developed diverse areas of service to the Delaware Valley community, providing communications support for boating races, model air-

plane meets, hot air balloon flights, parades, marathons, bikeathons, hamfests, and in both simulated and actual emergency situations ranging from limited power failures to widespread floods. Phil-Mont members provided distinguished service along the Delaware River and in the Poconos during the devastating flood of August, 1955.

The club's alliance with civil defense and RACES occasioned moving the meeting place and club station to Philadelphia CD operating centers, first in West Philadelphia and later, about 1956, to the CD command post in Germantown Town Hall. Membership mushroomed to one hundred, when a ceiling at that level was established. A membership waiting list quickly grew, but eventually the ceiling was lifted by popular demand.

Frequent need for a mobile communications center resulted in the construction and outfitting of a trailer for on-site use in activities. As the state-of-the-art (and state-of-the-treasury) progressed, Phil-Mont—primarily through the efforts of W3QQH/W3BBB—subsequently designed and fully equipped a series of five “Mo-Com” units... first trailers, then a converted school bus, and finally a self-contained step-van truck, still in use by Abington Township.

With the advent of repeater technology, Phil-Mont was among the early groups in the nation to undertake repeater operation, initially on ten meters, then moving in the 60s to 147.03 MHz. It was also in the early 60s that the club moved its meeting place to The Franklin Institute Science Museum at the invitation of W. Laurence LePage, W3QCV, a Phil-Mont member and then vice president of the Institute. The club also assumed sponsorship of W3TKQ, the amateur radio demonstration station at the Institute, beginning a long and mutually beneficial relationship between the club and the Institute which culminates in today's rededication celebration for the “New TKQ.”

Phil-Mont conducts monthly general meetings at The Franklin Institute featuring programs of interest to members and welcome guests, monthly business meetings of the directors, and weekly information nets on both HF and VHF bands. In addition, the club continues to provide communications for special events, offers weekly on-the-air morse code practice, conducts monthly license examination sessions, and will soon resume regular license preparation classes. And in an extraordinary effort to promote amateur radio and the education of youth, a trained group of Phil-Monters voluntarily operate the W3TKQ exhibit station at the Franklin Institute seven days a week, explaining and demonstrating ham radio to the hundreds of visitors—many with school groups—who tour the museum every day.

The Phil-Mont Mobile Radio Club is understandably proud of its long and continuing tradition of service to the community and to amateur radio, one which rightfully earns it designation by the American Radio Relay League as a Special Services Club.

*W3RM*



## THE AMERICAN RADIO RELAY LEAGUE, INC.

INTERNATIONAL SOCIETY FOR THE INTERNATIONAL AMATEUR RADIO UNION

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U.S.A. 06111

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203-866-1541  
FAX: 203-865-7531

**QST**  
OFFICIAL JOURNAL

September 13, 1991

The Phil-Mont Mobile Radio Club

Dear Friends:

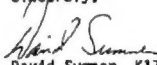
I would like to offer my congratulations on the rejuvenation of W3TKQ at the Franklin Institute Science Museum. What the volunteers in the Phil-Mont Mobile Radio Club have accomplished has enormous significance not only in the Philadelphia area, but as a model for other clubs throughout the country.

As a result of your efforts, many thousands of museum visitors will leave with a better understanding of Amateur Radio. In some cases, particularly young people, their lives will be permanently enriched by the discovery of new opportunities.

Your work is in the finest traditions of Amateur Radio.

73,

Sincerely,

  
David Sumner, K1ZZ  
Executive Vice President

SINCE 1914—OF, BY AND FOR THE RADIO AMATEUR



# CONTRIBUTORS

## \$500+

Richard Bechtel, W3CBF  
Lester & Grace Burket, W3HQJ  
Kay & Carter Craigie, KC3LM•KD3AO  
Henry Disston  
Harold & Marian Fox, W3AA•WA3YJR  
Harold Grace, W3HFY  
Frederick & Betsy Reichert, KA3BET•N3EBE  
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Howard Gilpin, W3SRU  
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Rolland Madara, W3PWG  
Merrill Mirman, KT3Z  
Louis Rulli, WB2WOM  
Charles Stouth, W3ZPP  
Frank Whitten, K3TEF

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William Conkle, W3IJN  
James Faries, W3AOA  
Raymond Garvin, W3GRY  
Stephen & Joann Hoch, KA3AMO•N3FTC  
Paul Ives, Jr., W3SMA  
Joseph McQueen, W3PCX  
Lawrence Stevenson, KD3QE  
Clarence & Sylvia Snyder, W3PYF  
Peter Tannenbaum, NA2E  
Levi Toni  
Morton Waber

## EQUIPMENT & SERVICES

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Paul Bohlander, W3VVS  
Kay Craigie, KC3LM  
Harold Grace, W3HFY  
Jack Haring, W3IIM  
Virginia Haring, W3IIN  
Stephen & Joann Hoch, KA3AMO•N3FTC  
Jacob Kovalchek, AK2I  
Leonard Kovnat, WB3JUA  
Samuel Kuncevich  
Rolland Madera, W3PWG  
Jules Markowitz, N3IZZ  
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Paul Policarpo, N3GMH  
William Popovic, N3FVI  
Benjamin Roeshman, W3LKI  
Jim Spencer, W3BBB  
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Carl Vold, W3SGR  
Frank Whitten, K3TEF  
Allan Witherup, W3KL

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(listed alphabetically)

Perry Blum, N3AXJ  
James Bock, K3PHC  
Kay Craigie, KC3LM  
Robert Field, WA3INW  
Robert Forrester, NS3Z  
Robert Freer, W3YLT  
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Lew Lewis, AG2H  
Rolland Madara, W3PWG/NNN0ARF\*  
Merrill Mirman, KT3Z  
Richard Moll, W3RM  
Edward Muse, WA3MRP  
Waldo Newell, K3JJO  
Paul Policarpo, N3GMH  
William Popovic, N3FVI  
Benjamin Roeshman, W3LKI  
John Spratt, N3ALW  
George Starks, AA2FU  
Frank Whitten, K3TEF/NNN0UCL\*

*\* Military Affiliate Radio System (MARS) callsign*



# **The Franklin Institute Science Museum**

Benjamin Franklin Parkway at 20th Street  
Philadelphia, Pennsylvania 19103-1194  
(215) 448-1139